

- 4) a cavity or defect of considerable size (Hohlraum), which should be present in larger numbers in an amorphous system than in a crystal⁹⁻¹¹. The importance of the amorphous phase has been pointed out also by Russian workers¹² (For the details of the models, see original papers).

It is generally accepted that the first model cannot explain the experimental results obtained by electron spin resonance and absorption spectroscopy^{6, 7, 11, 13}. With respect to the other three mechanisms, only model 4 seems to require a strong matrix dependence: Electrons should be more easily trapped in an amorphous matrix where more cavities and defects of suitable sizes are present than in a crystalline matrix

where the degree of order is much higher. In general, model 4 requires defects in the material to be present before ionization. The binding energy of the traps should be a function of the size and the arrangement of the matrix molecules.

It is not possible to apply models 2 and 3 on pure alcoholic systems to explain the formation of electron traps, because the concentration of anions is too small. Hence, in alcoholic systems only model 4 can be applied. Therefore, and because of the similarity in the behaviour of the aqueous and the alcoholic systems we are in favor of the "defect or cavity" model as the best description of the trapping sites for trapped electrons in alkaline ice.

⁹ K. EIBEN and D. SCHULTE-FROHLINDE, Z. physik. Chem. N.F., **45**, 20 [1965].

¹⁰ D. SCHULTE-FROHLINDE and K. EIBEN, Z. Naturforschg. **17 a**, 445 [1962].

¹¹ D. SCHULTE-FROHLINDE, Proceedings of the Rad. Research Society Meeting in Cortina (1966), North Holland Publishing Company, Amsterdam 1967, p. 251.

¹² V. N. BELEVSKII and L. T. BUGAENKO, Russ. J. Phys. Chem. **39**, 1580 [1965].

¹³ L. KEVAN, J. Am. Chem. Soc. **87**, 1481 [1965].

BERICHTIGUNGEN

Zu H. RICHTER und H. OEHME, Struktur von geschmolzenem Natrium bei 110° und 525 °C, Z. Naturforschg. **22 a**, 1470 [1967].
Die Abbildungen 1 und 2 sind zu vertauschen.

Zu H. FAISSNER, Charge Distributions According to the Cluster Model of Nuclear Fission, Z. Naturforschg. **21 a**, 1021 [1966].

The formula [Eq. (3)] for the statistical probability of obtaining k protons out of the z surplus protons, when drawing n of the a surplus nucleons, was incorrectly reproduced in the manuscript. It should have read:

$$W_{nk} = \binom{n}{k} \frac{z}{a} \frac{z-1}{a-1} \cdots \frac{z-k+1}{a-k+1} \cdot \frac{a-z}{a-k} \frac{a-z-1}{a-k-1} \cdots \frac{a-z-(n-k)+1}{a-n+1} \quad (3)$$

Consequently, three lines below Eq. (3) it should read:

"factors of the type $(a-z-\mu)/(a-k-\mu)$ ".

All computations were done using the correct formula.

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